Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (CURRENTLY AMENDED) An adaptive equalizer comprising:

an equalizer filter ~~(32)~~ for filtering a distorted signal from a communication channel, having a data signal input ~~(30)~~ for receiving said distorted signal, a feedback signal input for [[a]] an analog feedback control signal, and which generates an output signal at an output node ~~(35)~~;

circuitry (46) for processing said output signal and generating said analog feedback control signal, the circuitry comprising:

~~O a~~ first means ~~(38)~~ for measuring a short- term-amplitude signal of said output signal,

~~O a~~ second means ~~(38)~~ for measuring a long- term-amplitude signal of said output signal,

~~O a~~ comparator means ~~(43)~~ that compares said short-term-amplitude signal and said long- term-amplitude signal and that determines during actual data transmission the evolution of said analog feedback control signal, arranged such that said distorted signal is compensated for its higher frequency attenuation in said communication channel.

2. (ORIGINAL) An adaptive equalizer such as in claim 1, wherein the short-term-amplitude signal of the output signal is indicative for the amplitude of the high-speed component of said output signal.

3. (PREVIOUSLY PRESENTED) An adaptive equalizer such as in claim 1, wherein the long-term-amplitude signal is indicative for the amplitude of the output signal stripped from its possible overshoot peaks.

4. (CURRENTLY AMENDED) An adaptive equalizer such as in claim 1, wherein the short-term-amplitude signal of the output signal is generated by a circuit comprising:

a high-pass filter; and

a peak detector.

5. (PREVIOUSLY PRESENTED) An adaptive equalizer such as in claim 1, wherein the long-term-amplitude signal of the output signal is generated by a circuit comprising a low-pass filter and a peak detector.

6. (CURRENTLY AMENDED) An adaptive equalizer such as in claim 1, wherein said output signal is fed to a limiting amplifier ~~(36)~~ to produce a digital output signal.

7. (CURRENTLY AMENDED) An multi-stage adaptive equalizer comprising at least a first and a second adaptive equalizers such as in claim 1, wherein the output signal of said first adaptive ~~equaliser~~ equalizer is fed to the data input node of said second adaptive ~~equaliser~~ equalizer.

8. (CURRENTLY AMENDED) A method for adaptively ~~equalising~~ equalizing a distorted signal comprising high frequency attenuation received from a communication channel, comprising the steps of:

Filtering said distorted signal and providing an output signal at an output node,

Comparing a short-term-amplitude signal of said output signal to a long-term-amplitude signal of said output signal to provide [[a]] an analog feedback signal, and

Providing [[a]] the analog feedback signal to compensate said high frequency attenuation in said distorted signal.

9. (ORIGINAL) The method as in claim 8, wherein the short-term-amplitude signal of the output signal is indicative for the amplitude of the high-speed component of the output signal.

10. (PREVIOUSLY PRESENTED) The method as in claim 8, wherein the long-term-amplitude signal is indicative for the amplitude of the output signal stripped from its possible overshoot peaks.